

PERELOMOV, A.M.

Depolarization of μ -mesons and polarization of Σ -particles
in a magnetized paramagnetic gas. Zhur. eksp. i teor. fiz.
no.5:1418-1422 My '61, (MIRA 14:7)
(Magnetohydrodynamics)
(Mesons)

81421

S/056/60/039/004/039/048
B006/B056

24.6900
AUTHORS:

Zel'dovich, Ya. B., Perelomov, A. M.

TITLE:

The Effect of Weak Interaction¹⁹ Upon the Electromagnetic Properties of Particles

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 4(10), pp. 1115 - 1125

TEXT: It was the purpose of the present work to investigate the contribution made by weak particle interaction to electromagnetic interaction. In the introduction, the problem as such is discussed, and the contents of the paper is given. In section 2, the graphs (Figs. 1-6) which make a contribution to the electromagnetic properties of the neutrino, the leptons (e and μ), and the baryons are investigated; the contributions are determined in orders of magnitude of the weak interaction constant for individual cases. For this purpose, two variants of the theory are studied: that of four-fermion interaction and that of the intermediate, heavy, charged X-boson. In several cases, the order of g is reduced by the introduction of the X-boson, i.e. the effect is increased. In section 3,

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the general electromagnetic properties resulting from the Lorentz and gradient invariances of the theory, from the probability and the theory of universal weak interaction, and from the theory of the two-component neutrino are dealt with. In section 4, the interaction within the framework of the perturbation theory is investigated, and the order of magnitude of the divergence of the integrals obtained is determined. The characteristic electromagnetic properties of the particles are numerically estimated. In the case of baryons, one assumes that strong interaction replaces weak interaction already at momenta of the order of M_n (M_n -

nucleon mass). In section 5, the experimentally observable particle scattering effects are discussed, especially the polarization of particles in the scattering plane, because this effect is related to parity non-conservation. Neutrino scattering by nuclei as well as the effects of new electromagnetic properties in nuclear physics are discussed. Section 6 deals with the problem of the possible modifications of the initial assumptions on weak interaction, by adding the derivative of the neutral currents to the ordinary derivative of the charge currents. The conditions under which the additional term does not lead to a decay

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B006/B056

and cannot be observed experimentally, are studied, as well as the effects
which are due to the scattering of electrons by protons. The authors thank
A. M. Brodskiy, G. M. Gandel'man, B. L. Ioffe, L. B. Okun', and
K. A. Ter-Martirosyan for discussions. Ya. A. Smorodinskiy, A.I. Akhiezer,
L. N. Rozentsveyg, and I. M. Shmushkevich are mentioned. There are
6 figures and 21 references: 10 Soviet, 2 Italian, and 9 US.

SUBMITTED: March 23, 1960

Card 3/3

PERELOMOV, A.M.

Possible determination of additional characteristics of an
unstable particle. Dokl. AN SSSR 146 no.1:75-78 S '62.
(MIRA 15:9)

- 1, Predstavleno akademikom Ya.B. Zel'dovichem.
(Particles (Nuclear physics))

ZEL'DOVICH, Ya.B.; PERELOMOV, A.M.

Effect of weak interaction on the electromagnetic properties of
particles. Zhur. eksp. i teor. fiz. 39 no.4:1115-1125 0 '60.

(MIRA 13:11)

(Particles)

PERELOMOV, A.M.

Rotation of the plane of polarization of light in the case of non-
conservation of parity. Zhur.eksp.i teor.fiz. 41 no.1:183-185
Jl '61. (MIRA 14:7)
(Polarization (Light)) (Molecular rotation)

ZHIVOPISTSEV, P.A.; PERELOMOV, A.M.; SHIROKOV, Yu.M.

Relativistic corrections in the phenomenological theory of
levels in light nuclei. Zhur.eksp. i teor.fiz. 36 no.2:
478-480 P '59. (MIRA 12:4)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo
universiteta.

(Nuclear shell theory)

ZHIVOPISTEV, P. A., KAMINSKIY, A. K., PERELOMOV, A. M. and CHIRKOV, Y. M.

"Sur le Calcul des Niveaux d'energie des noyaux legers."

report presented at the Intl. Congress for Nuclear Interactions (low Energy) and Nuclear Structure (Intl. Union Pure and Applied Physics) Paris, 7-12 July 1958.

24(5)

AUTHORS:

Zhivopistsev, F. A., ~~Perelomov, A. M.~~ SOV/56-36-2-19/63
Shirokov, Yu. M.

TITLE:

On Relativistic Corrections to the Phenomenological Theory of
the Levels of Light Nuclei (O relyativistskikh popravkakh v
fenomenologicheskoy teorii urovney legkikh yador)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,
Vol 36, Nr 2, pp 478-480 (USSR)

ABSTRACT:

Blatt and Weisskopf (Veyskopf) (Ref 1) estimated the contribution
made by consideration of relativistic effects to the theory of
the levels of light nuclei as amounting to 10-20%. At its
present stage, the meson theory offers no possibility of
satisfactorily solving this problem. A phenomenological
treatment of the problem must therefore be attempted by basing
on the general group properties of the relativistic invariance
of the quantum theory (Ref 2). The authors of the present paper
proceed from the nonrelativistic Hamiltonian

$$H = \sum_n T_n + \sum_{m>n} H_{mn} \quad (T_n = p_n^2/2M, \text{ the kinetic energy of the } n\text{-th nucleon}).$$

 H_{mn} describes interaction between the nucleons
 m and n . According to reference 2 consideration of

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On Relativistic Corrections to the
Phenomenological Theory of the Levels of Light Nuclei

SOV/56-36-2-19/63

relativistic effects (with an accuracy extending to terms of 2nd order of v/c) leads to the form

$$H = \sum_n T_n + \sum_{m>n} H_{mn} + \sum_n T'_n + \sum_{m>n} H'_{mn} \quad (T'_n = -p_n^2/2M^2)$$
 the correction to the kinetic energy of the n -th nucleon). Further, the correction term to the interaction Hamiltonian H'_{mn} is investigated. This interaction correction formula is written down for 2 particles in the states

$$|0s_{1/2}^2 \ 01\rangle, |0s_{1/2}^2 \ 10\rangle, |1p_{3/2}^2 \ 01\rangle, |1p_{1/2}^2 \ 01\rangle$$

with $r_0 = 1.65 \cdot 10^{-13}$ cm ($\hbar\omega = 15$ Mev), the potential is written down in the form $V = V_0(0.317 + 0.500 P + 0.183 PQ) f(r/a)$

and for the Gaussian potential course (Ref 3)

$$V_0 = -51.9 \text{ Mev}, a = 1.73 \cdot 10^{-13} \text{ cm}, f(x) = e^{-x^2}$$

Yukawa potential (Ref 1)

$$V_0 = -68 \text{ Mev}, a = 1.17 \cdot 10^{-13} \text{ cm}, f(x) = e^{-x}/x$$

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On Relativistic Corrections to the
Phenomenological Theory of the Levels of Light Nuclei

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and for the square potential well (Ref 1)

$V_0 = -33.6 \text{ Mev}$, $A = 2.1 \cdot 10^{-13} \text{ cm}$. $V(\text{in kev})$ is calculated and

compiled in a table. The correction was found to depend to a high degree on the shape of the potential and is of the order of magnitude 0.02 - 0.2 Mev for a pair of nucleons, 0.2-2 Mev for light nuclei, and 2-20 Mev for heavy nuclei. For nuclear levels it is of the same order as for nucleon pairs. There are 1 table and 3 references, 2 of which are Soviet.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta
(Institute for Nuclear Physics of Moscow State University)

SUBMITTED: June 16, 1958

Card 3/3

L 4066-66 EWT(m) DIAAP

ACCESSION NR: AT5022318

UR/3138/65/000/337/0001/0040

AUTHOR: Perelomov, A. M.; Popov, V. S.; Malkin, I. A.

TITLE: Unitary and spin content of SU(6) supermultiplets

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 337, 1965. Unitarnoye i spinovoye sodержaniye supermul'tipletov SU(6), 1-40

TOPIC TAGS: unitary symmetry, particle symmetry, quark model, nuclear model

ABSTRACT: A method is developed for determining the number of unitary multiplets with a given spin in a supermultiplet of the SU(6) group. Some of the properties of representations of group SU(n) are summarized and a method is described for narrowing SU(6) representations into the subgroup SU(3) $\oplus$ SU(2), which corresponds physically to an interaction which conserves SU(3) symmetry. This method is used for compiling tables which include reductions of all SU(6) representations given by Young diagrams with total number of cells $f = 3, 6$ and 9 . SU(6) representations are reduced with respect to subgroup SU(4) $\oplus$ SU(2) $\oplus$ U(1), which corresponds to an

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L-4066-66

ACCESSION NR: AT5022318

interaction which separates Λ -quarks with non-zero strangeness from p - and n -quarks. The $SU(4)$ supermultiplets obtained in this reduction are identical to the supermultiplets which were proposed by Wigner in 1937. A table for the reduction of the Kronecker product of the simplest representations of group $SU(6)$ is also given. Orig. art. has: 6 figures, 25 formulas, 2 tables.

ASSOCIATION: *Imenches teoreticheskoy i eksperimental'noy fiziki Goskmiteta po izucheniyu osnovnykh zakonov fiziki* (Institute of Theoretical and Experimental Physics, State Committee on the Use of Atomic Energy (USSR))

SUBMITTED: 27Mar65

ENCL: 00

SUB CODE: MA, NP

NO REF SOV: 000

OTHER: 000

BVK
Card 2/2

L 4071-66 EAT(d) LWP(c)

ACCESSION NR: AT5024121

UR/3138/65/000/338/0001/0032

AUTHOR: Perelomov, A. M.; Popov, V. S. 44, 65

TITLE: Casimir operators for $U(n)$ and $SU(n)$ groups 44, 65

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 338, 1965. Operatory Kazi- 16, 44, 65

TOPIC TAGS: particle symmetry, unitary symmetry, group theory, mathematic operator

ABSTRACT: A simple method is proposed for finding Casimir operators C_p of arbitrary order p for $U(n)$ and $SU(n)$ groups. These groups were selected because they are the most interesting from the standpoint of the physicist. The theoretical method proposed in the paper is also applicable to the other classical groups. A formula is derived for the operator C_p :

$$C_p(f_1, \dots, f_n) = \sum_{i,j=1}^n (a^p)_{ij} f_i f_j$$

This formula theoretically reduces the problem of calculating the eigenvalues of

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ACCESSION NR: AT5024121

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Casimir operators to raising the matrix a to the p -th power. This formula is also useful for calculating the general properties of Casimir operators. The formula is used for establishing the relationship between the respective Casimir operators for groups $U(n)$ and $SU(n)$. The explicit values of all C_p operators are given for completely symmetric and completely anti-symmetric representations. The basic formula is converted into a form which is convenient for computations and several first members of the C_p expansion are determined with arbitrary p . The authors study the relationship between C_p and the symmetrized operator I_p (M. Umezawa, Nucl. Phys., 48, 111, 1963; 53, 4, 1964). A summary is given of specific formulas for all C_p operators with $p \leq 6$ and I_p operators with $p \leq 5$. The authors are sincerely grateful to I. S. Shapiro for discussing the results of this work. Orig. art. has: 56 formulas. 44, 55

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki Goskomiteta po ispol'zovaniyu atomoy energii SSSR (Institute of Theoretical and Experimental Physics, State Committee on the Use of Atomic Energy, SSSR)

SUBMITTED: 22Apr65

ENCL: 00

SUB CODE: MA, NP

NO REF SOV: 002

OTHER: 014

L.V.K.
Card 2/2

L 1841-66 EWT(d) IJP(c)

ACCESSION NR: AT5022282

UR/3138/65/000/352/0001/0035

AUTHOR: Perelomov, A. M.; Popov, V. S.

TITLE: Casimir operators for the orthogonal and symplectic group

SOURCE: USSR, Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii.
Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 352, 1965.
Operatory Kazimira dlya ortogonal'noy i simplekticheskoy gruppy, 1-35

TOPIC TAGS: group theory, eigenvalue, mathematic operator

ABSTRACT: Recently, the authors developed a method (A. M. Perelomov, V. S. Popov Nucl. Phys. /in press/) which makes it possible to find explicit formulas for all Casimir operators in the case of $U(n)$ and $SU(n)$ groups. In the present paper, formulas are obtained in similar fashion for Casimir operators of the remaining classical groups, i.e., the rotation groups $O(2n+1)$ and $O(2n)$, and the symplectic group $SP(2n)$. The calculations are performed simultaneously for the orthogonal and the symplectic group. The main result is incorporated in the formula

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L 00985-66 E/T(d)/E/T(m)/T/MA(m)-2 I/P(o)

ACCESSION NR: AP5019590

UR/0386/65/001/006/0015/0018

AUTHOR: Perelomov, A. M.; Popov, V. S. 65

TITLE: Casimir operators for a unitary group 16,55 23 15

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 6, 1965, 15-18

TOPIC TAGS: group theory, particle physics

ABSTRACT: The groups $U(n)$ and $SU(n)$ have been employed most successfully for the description of the symmetries of elementary particles. A critical problem is that of finding all invariant operators which may be formed by the generators of the group. Although the problem has been studied before, explicit expressions for the characteristic values of invariant operators of arbitrary order have not been given. A solution for that problem is offered here. "The authors express their sincere gratitude to I. S. Shapiro for his discussion of the results of this paper." Orig. art. has: 10 formulas. 65

ASSOCIATION: none

SUBMITTED: 04May65

ENCL: 00

SUB CODE: MA, Np

NO REF SOV: 001

OTHER: 005

Card 1/1

15-66 EWT(d), EWT(1) IJP(o)

ACC NR: AP6004936

SOURCE CODE: UR/0056/66/0050/001/0179/0198

AUTHOR: Perelomov, A. M.; Popov, V. S.

ORG: Institute of Theoretical and Experimental Physics (Institut teoreticheskoy i eksperimental'noy fiziki)

TITLE: The Lorentz group as a dynamic symmetry group of the hydrogen atom

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 1, 1966, 179-198

TOPIC TAGS: group theory, Lorentz transformation, Green function, quantum mechanics

ABSTRACT: The latent (dynamic) symmetry of the hydrogen atom is considered from the point of view of group theory. It is shown that transition from the compact group $O(4)$ to its noncompact analog (Lorentz group) makes it feasible to describe the discrete as well as the continuous spectrum. In this case the wave functions of the continuous spectrum with a given energy $E > 0$ lead to an infinite-dimensional irreducible representation $D(0, \rho)$ of the Lorentz group ($\rho = \sqrt{2/E}$), which belongs to the fundamental series of the unitary representations. Wave functions of discrete spectrum states with a principal quantum number n lead to a finite-dimensional representation $D((n-1)/2, (n-1)/2)$ of the Lorentz group. A wave-function symmetry specific for the Coulomb potential is found for continuous and discrete states. The special case of states with $l = 0$ when the Lorentz group degenerates into the Galilean group

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L 14550-66

ACC NR AP6004936

is also considered. An expansion of the Coulomb Green's function (for $E > 0$) into irreducible representations of the Lorentz group is obtained. An explicit expression for the Green's function of the Kepler problem in n -dimensional space is derived and the geometric meaning of the symmetry possessed by the Coulomb wave functions is clarified. Orig. art. has: 76 formulas and 3 figures. [CS]

SUB CODE: 20/ SUBM DATE: 19Jul65/ ORIG REF: 013/ OTH REF: 014/ ATD PRESS:

4197

Card 2/2

PERELOMOV, A.M.

Polarization effects in neutrino-electron scattering with allowance for radiation corrections. IAd. fiz. 1 no.6: 1045-1049 Je '65. (MIRA 18:6)

1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

L 4884-66 EWT(d) IJP(c)

ACCESSION NR: AP021147

UR/0386/65/002/001/0034/0037

AUTHOR: Perelomov, A. M.; Popov, V. S.

TITLE: Casimir operators for the orthogonal and symplectic groups

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 1, 1965, 34-37

TOPIC TAGS: group theory, operator equation, orthogonal function, mathematic trans-formation

ABSTRACT: The article deals with the problem of finding invariant operators (Casimir operators C_p) which can be constructed from the generators of a given group of transformations. Since no explicit expressions for the eigenvalues of the operators C_p with $p > 2$ were ever published (with the exception of the operator C_4 for the group $Sp(4)$), the authors derive explicit expressions for C_p with $p = 2, 3$, and 4 , valid for any of the groups $O(2n + 1)$, $O(2n)$, and $Sp(2n)$. Since these are groups of rank n , each contains n independent Casimir operators. The operators C_p with odd p can be expressed in terms of C_{2q} with $2q < p$. In the case of the groups $O(2n + 1)$ and $Sp(2n)$, the operators $C_2, C_4, \dots, C_{2n}$ form a complete set of independent invariant operators. A somewhat different approach is used for the group

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L 4884-66

ACCESSION NR: AF5021147

$O(2n)$. The result is also applicable to the case when not all representations of the groups $O(2n)$ and $O(2n + 1)$ can be described by a Young tableau. Orig. art. has: 8 formulas.

ASSOCIATION: none

SUBMITTED: 20 May 65

ENCL: 00

SUB CODE: GP, MA

NR REF SOV: 001

OTHER: 004

CC
Card 2/2

L 2753-66 ENT(m)/I/EWA(m)-2

ACCESSION NR: AP5024344

UR/0367/65/002/002/0294/0308

AUTHOR: Perelomov, A. M.; Popov, V. S.

TITLE: Transformation of the direct product of irreducible representations of the group $SU(3)$ into irreducible sets

SOURCE: Yadernaya fizika, v. 2, no. 2, 1965, 294-306

TOPIC TAGS: particle symmetry, unitary symmetry, mathematic transformation, mathematic matrix, group theory

ABSTRACT: A geometric method is given for determining the group characters of irreducible representations of the group $SU(3)$. The diagrams for these characters and their physical meanings are discussed. The structure of the Clebsh-Gordan series for the $SU(3)$ group is analyzed. A simple geometric method is developed for expanding the direct product of two irreducible representations of the group $SU(3)$ into irreducible sets. The authors would like to express their sincere gratitude to I. Yu. Kobzarev and L. B. Okun for discussing the results of this work and for many useful remarks, and also to V. B. Mandel'shteyn for discussing the tensor method of

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L 2753-66

ACCESSION NR: AP5024344

expansion." Orig. art. has: 9 figures, 25 formulas.

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki GKIAE (Institute of Theoretical and Experimental Physics, GKIAE) 44, 55

SUBMITTED: 13Jul64

ENCL: 00

SUB CODE: MA

NO REF SOV: 004

OTHER: 015

Card 2/2

FERETOMOV, A.M.; POBOV, V.G.; MALEN, I.A.

Unitary and spin content of SU(6) supermultiplets. IAd. fiz.
L no.31533-242 3 '65. (MIRA 18:9)

1. Institut teoreticheskoy i eksperimental'noy fiziki
Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii.

L 07960-67 EWT(1)

ACC NR: AT6031326

SOURCE CODE: UR/3138/66/000/435/0001/0012

AUTHOR: Perelomov, A. M. ; Popov, V. S. ; Terent'yev, I. V.

34
B+1

ORG: none

TITLE: Some peculiarities of the solutions to the Schrodinger wave equations for potentials with a Coulomb tail

SOURCE: USSR. Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 435, 1966. Nekotoryye svoystva resheniy uravneniya Shredingera dlya potentsialov s kulonovskim khvostom, 1-12

TOPIC TAGS: Schrodinger equation, wave equation, scattering matrix, Coulomb tail

ABSTRACT: An asymptotic form of the wave function $\psi_{em}(z)$ at $z \gg 1$ has been found for the potentials of the type $V(z) \rightarrow \frac{1}{2}z^{-2}$ as $z \rightarrow \infty$. The character of the $\psi_{em}(p)$ singularity at the point $p^2 = -z^2$ was determined. A connection was found between the C_{2L} coefficient in the asymptotic formula derived and the residue of the scattering matrix $S_L(k)$ at the pole $k = i\alpha$, which

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... Coulomb potential does not destroy the higher symmetry of the spectrum of levels. Orig. art. has: 24 formulas.

SUB CODE: 12/ SUBM DATE: 17Mar66/ ORIG REF: 007/ OTH REF: 007/

APPROVED FOR RELEASE: 06/15/2000 CIA-RDP86-00513R001240010016-6"

Card 2/2 *eqh*

PERELOMOV, L. S.

"Obshchina i sem'ya v drevnem Kitaye."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,
Moscow, 3-10 Aug 64.

KOVALEV, N.M.; PERELOMOV, N.G.; KUCHER, A.M., kand. tekhn.
nauk, dots., retsenzent; ZHURAVLEV, S.A., kand. tekhn.
nauk, red.

[Milling machines] Frezernye stanki. Moskva, Mashino-
stroenie, 1964. 107 p. (Bibliotekha frezerovshchika,
no.3) (MIRA 18:8)

PEREPECHKIN, L.P.; TROITSKAYA, V.A.

Spun acetate fibers from viscous solutions of acetic acid.
Khim. volok. no.2:55-57 '64. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov
i organicheskikh produktov.

SOV/11-59-4-8-16

3 (5)

AUTHORS: Pogonya-Stefanovich, Yu. F. and Perelomova, V. G.

TITLE: Volcanic Necks of Devonian Age in the North-Western Part of the Minusinsk Depression (Vulkanicheskiye zherloviny Devonskogo vozrasta severo-zapadnoy chasti Minusinskoy kotloviny)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 4, pp 99 - 101 (USSR)

ABSTRACT: The authors describe ancient necks of volcanos which were active in the Devonian age. They were discovered by the authors and A. I. Aleksandrov in the north-western part of the Minusinsk depression. Thick blankets of effusive rocks in Lower- and Middle-Devonian deposits were formed by the successive eruption of these volcanos. The necks were filled with rocks of similar composition, texture and structure with those found in the effusive rocks. Three more-or-less-sharply-defined zones were found in each neck, each zone filled with different rock. The study of accumulated rocks showed that they were formed by successive

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SOV/11-59-4-8/16

Volcanic Necks of Devonian Age in the North-Western Part of the
Minusinsk Depression

eruptions of these volcanos and the composition of the
magma erupted varied during the same cycle of volcanic
activity.

ASSOCIATION: Krasnoyarskoye geologicheskoye upravleniye Ministerstva
geologii i okhrany nedr SSSR (The Krasnoyarsk Geological
Administration of the Ministry of Geology and Conservation
of Mineral Resources of the USSR.

SUBMITTED: June 5, 1958.

Card 2/2

PEREL'SHTEYN, A.E., SEREBRINA, L.A., kand.med.nauk

Some biochemical aspects of the blood in lymphogranulomatosis.
Vrach.delo no.3:301 Mr'58 (MIRA 11:5)

1. Ternopol'skaya oblastnaya bol'nitsa.
(BLOOD--ANALYSIS AND CHEMISTRY)
(HODGKIN'S DISEASE)

PEREL'SHTEYN, A.G.

A well organized collective. Avtom., telem. i sviaz' 7
no.7:22-25 J1 '63. (MIRA 16:10)

1. Nachal'nik Voronezhskoy distantzii signalizatsii i svyazi
Yugo-Vostochnoy dorogi.

PEREL'SHTEYN, A.E. (g.Ternopol', ul. Ostrovskogo 19, kv.3)

Eosinophilic granuloma of the large intestine. Vop onk. 3
no. 10:83-89 '62. (MIRA 17:7)

1. Iz Ternopol'skogo oblaatnogo onkologicheskogo dispansera
(glavnyy vrach N.V.Alkhimov).

PEREL'SHTIKIN, A. E.; ZAKRZHEVSKIY, V. V.

Data on mortality from malignant tumors in Ternopol' Province;
from autopsy data. Vop. onk. 8 no.7:96-99 '62. (MIRA 15:7)

1. Iz Ternopol'skogo oblastnogo onkologicheskogo dispansera
(glav. vrach - N. A. Alkhimov)

(TERNOPOL' PROVINCE--CANCER--MORTALITY)

PEREL'SHTEYN, A.E., SIEREBRINA, L.A., kand.med.nauk.

Pregnancy in lymphogranulomatosis. Akush. i gin. 34 no.2:86-89
Mr-Apr '58 (MIRA 11:5)

1. In Ternopol'skoy oblastnoy bol'nitsy.
(HODGKIN'S DISEASE, in pregn.
pregn. (Rus))
(PREGNANCY, in various dis.
Hodgkin's dis., progn. (Russ))

ca

Blood transfusion after strychnine poisoning. A. G. Karavandov and A. E. Perelshtein. Med. exp. (Ukr.) No. 8, 65-69(1937).—Lethal doses of strychnine (0.0005 g./kg. body weight) were injected subcutaneously into dogs. Bleeding always abated the lives of the poisoned animals. Blood transfusion (with or without bleeding) did not prevent death of the poisoned dogs.
S. A. Corson

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ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

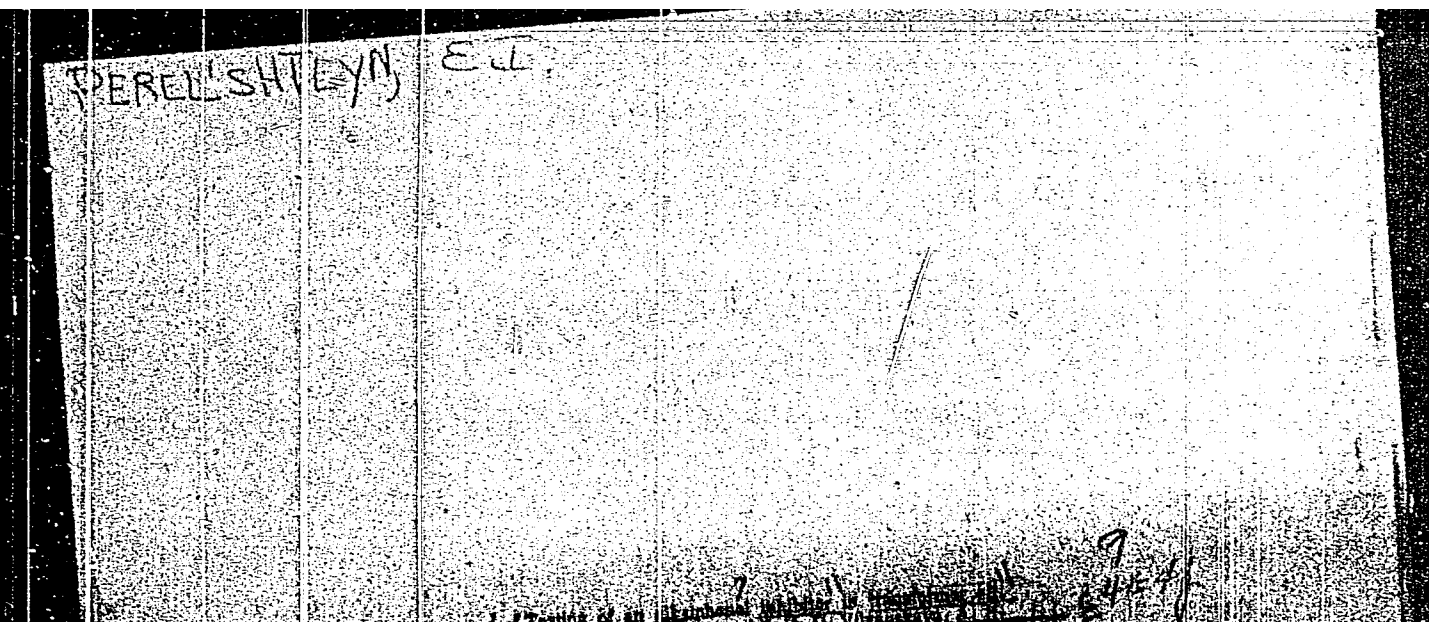
SOURCE NO.

RESEARCH NO.

RELATIONSHIP

"APPROVED FOR RELEASE: 06/15/2000

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APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001240010016-6"

PEREL'SHTAYN, I., inzh.

Substantiating the thermodynamic similitude. Khol.tekh. 37 no.3:
35-38 My-Je '60. (MIRA 13:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy
promyshlennosti.

(Dimensional analysis)

(Refrigeration and reftigerating machinery)

89835
S/066/60/000/003/001/001
A003/A029

24.5200 (1492, 1121, 1537)
AUTHOR: Perel'shteyn, I.

TITLE: Concerning the Proof of Thermodynamic Similarity

PERIODICAL: Kholodil'naya tekhnika, 1960, No. 3, pp. 35-38

TEXT: The problem of thermodynamic similarity has been investigated sufficiently in Soviet and foreign literature (Refs. 3-10). The article aims at proving the suggested criteria with the aid of the π -theorem which has not yet been applied to thermodynamics. The π -theorem is briefly explained. An equation is derived with the aid of this theorem for an ideal gas, the specific volume of which is determined by the temperature, the pressure and the universal gas constant: $v = f(p, T, R)$, (1), where $n = 4$, $l = 4$, $k = 3$ (m, kg, °K). The designations n, l, k are taken over from the π -theorem. The equation $pv = \text{const}$ is obtained for the ideal gas. The state equations proposed by Van der Waals, Clausius, Bertelot and Diterici correspond to the functional dependence $v = f(p, T, R, p_{cr}, T_{cr}, v_{cr})$ (3), where the index cr refers to the critical parameters. [Abstractor's note: Subscript cr (critical) is a translation from the Russian κ_p (kriticheskiy)].

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28(5)

SOV/66-59-5-8/35

AUTHORS: Perel'shteyn, I., Kovalev, A., Engineers

TITLE: Enthalpy and Heat Capacity of Certain Candy Goods

PERIODICAL: Kholodil'naya tekhnika, 1959, Nr 5, pp 33-36 (USSR)

ABSTRACT: The article describes experimental investigations conducted with a view to determining the enthalpy and heat capacity in the range of temperature from -10 to 40°C of three kinds of chocolate (milk chocolate "Extra", "Sport", "Soya") and of a sugar coating. For the caloric tests the method of the adiabatic calorimeter was applied, which almost completely eliminates loss of heat to the surrounding medium. A description is given of the calorimeter and of the electronic system of preventing heat losses. The mentioned candy goods contain ingredients, which at rising temperature change their phase state. To determine the heat capacity of such substances the heat interval must be very small, viz, 3°C in the test in question. The values of enthalpy and heat capacity, as resulting from the investigation, are shown in table 2. It is evident from graph 3 that the heat capacity of chocolate "Extra" and "Sport" have one maximum, while "Soya" has two maximums, which correspond with the temperature intervals of the most intensive phase changes of the basic ingredients;

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SOV/66-59-5-8/35

Enthalpy and Heat Capacity of Certain Candy Goods

to the left of the maximum, the greater part of the mixture is in a solid state, to the right - in a liquid state. According to Ridel [Ref 3], Olenov [Ref 4] and several other scientists the heat capacity of various fats and oils which belong to the multi-component mixtures is dependent upon temperature. The heat capacity of sugar coating is very much less contingent on temperature than chocolate, while remaining constant between 15 and 40°C, due to the fact that in this case no phase changes occur. There are: 1 diagram, 1 circuit diagram, 2 tables, 1 graph and 5 references, of which 4 are Soviet and 1 German.

ASSOCIATION: VNIKhI (All-Union Scientific Research Institute of the Refrigeration Industry)

Card 2/2

PEREL'SHTEYN, I.I.

Experimental study of the thermal properties of an azeotropic mixture of freon-12/4 and freon-C318. Inzh.-fiz.zhur. 5 no.12: 27-33 D '62. (MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti imeni A.I.Mikoyana, Moskva.
(Freons—Thermal properties)

PERELSHTEYN, I. I.

"Thermodynamic properties of an azeotropic mixture of Freon 124
and Freon C 318."

Report presented at the 11th International Congress of Refrigeration,
(IIR), Munich, West Germany, 27 Aug-4 Sep 63.

✓NIKH Moscow

PEREL'SHTEYN, I.I., inzh.

Thermodynamic properties of sulfur hexafluoride. Khol. tekhn.
38 no.3:72-75 My-Je '61. (MIRA 15:1)
(Sulfur fluoride)

PEREL'SHTEYN, I.I., inzh.

Thermodynamic properties of an azeotropic mixture of freon-12⁴ and
freon-C318. Khol.tekh. 39 no.2:76-77 Mr-Ap '62. (MIRA 15:4)
(Freons--Thermal properties)

PHASE I BOOK EXPLOITATION

SOV/5814

Perel'shteyn, Isaak Il'ich

Termodinamicheskiye svoystva shestiftoristoy sery; nauchnoye
soobshcheniye (Thermodynamic Properties of Sulfur Hexafluoride;
Scientific Report) Moscow, Gostorgizdat, 1961. 45 p. 1000
copies printed.

Sponsoring Agency: Glavnii pri Gosekonomsoвете SSSR. Vsesoyuznyy
nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti
imeni A. I. Mikoyana.

Scientific Ed.: I. S. Badyl'kes, Doctor of Technical Sciences,
Professor; Ed.: M. S. Kaplun; Tech. Ed.: N. N. Mamontova.

PURPOSE : This booklet is intended for technical personnel and
scientists in industries which employ artificial cold.

COVERAGE: The booklet reports on research by the All-Union Scien-
tific Research Institute of the Cold-Storage Industry on the

Card 1/5₃

Thermodynamic Properties of Sulfur (Cont.)

SOV/5114

thermodynamic properties of sulfur hexafluoride (SF_6), a purportedly new working fluid in cold engineering at low temperatures (to -45°C) and in heat-power engineering at steam-power and gas-turbine plants. The following data on the thermodynamics of SF_6 were determined: 1) the vapor pressure curve from -31° to critical point; 2) an equation for the saturated vapor pressure curve; 3) the specific volume of liquid SF_6 from -31° to $+40^\circ$; 4) the specific volume of dry saturated vapor from -31° to $+40^\circ$, and of superheated vapor from -31° to $+100^\circ\text{C}$ and at pressures of from 2.11 to 32 atm; and 5) Beattie-Bridgeman equations of state. Data on the saturated vapor from -50 to $+40^\circ$ per each 2° , and on the superheated vapor at temperatures of from -50 to $+100^\circ$ per each 5° and at pressures of from 2.11 to 32 atm per each 0.5 - 2 atm are tabulated; pressure-volume, entropy, and enthalpy diagrams are plotted. Data on the theoretical energy and volume characteristics of NH_3 , Freon-22, and SF_6 are reviewed, and theoretical values of the specific cold-productivity (kcal/kw-hr) and

Card 2/5

PEREL'SHTEYN, Isaak Il'ich; BADYL'KES, I.S., nauchnyy red., doktor
tekhn.nauk, prof.; KAPLUN, M.S., red.; MAMONTOVA, N.N.,
tekhn.red.

[Investigating the thermodynamic properties of refrigerants]
Issledovanie termodinamicheskikh ~~svoi~~ kholodil'nykh agentov.
Moskva, Gostorgizdat, 1962. 60 p. (MIRA 16:7)
(Refrigerants--Thermodynamic properties)

PZREL'SHTEYN, Isaak Il'ich; BAYL'KES, I.S., doktor tekhn. nauk,
prof., nauchnyy red.; KAPLUN, M.S., red.; ANTSELOVICH,
K.I., tekhn. red.

[Methods for the experimental testing of the thermodynamic
properties of refrigerants] Metody eksperimental'nogo is-
sledovaniia termodinamicheskikh svoistv kholodil'nykh agen-
tov; nauchnoe soobshchenie. Moskva, Gostorgizdat, 1963. 61 p.
(MIRA 16:7)

(Refrigerants--Thermodynamic properties)

PEREL'SHTEYN, Isaak Il'ich; BADYL'KES, I.S., doktor tekhn. nauk, prof.,
nauchnyy red.; KAPLUN, M.S., red.; MAMONTOVA, N.E., tekhn. red.

[Thermodynamic properties of sulfur hexafluoride] Termodinamicheskie svoystva shestifloristoi sery; nauchnoe soobshcheniye. Moskva, Gos.izd-vo torg. lit-ry, 1961. 45 p. (MIRA 14:6)
(Sulfur fluoride)

PEREL'SHTEYN, I.Yu.

Gunita work in the construction of reinforced concrete storage tanks. Stroi.truboprov. 8 no.7:11-12 J1 '63. (MIRA 17:2)

1. Glavnyy mekhanik tresta Yuzhgazprovodstroy, Rostov-na-Donu.

PEREL'SHTEYN, I.Yu.

To increase the reliability and durability of machinery and equipment. Stroi. truboprov. 8 no.3:6-7 Mr '63. (MIRA 16:5)

1. Glavnyy mekhanik tresta Yuzhgasprovodstroy, Rostov.
(Construction equipment)

FEREL'SHTEYN, I.Yu.

• Improve the quality of construction equipment. Stroi. trub. 9
no.7:7-8 J1 '64. (MIRA 17:11)

1. Trest Yuzhgasprovodstroy, Rostov-na-Donu.

PEREL'SHTEYN, I. Yu.

Using the S-630A unit for guniting reinforced concrete tanks.
Stroi. truboprov. 8 no.11:22-23 '63 (MIRA 17:7)

1. Trast Muzhgazprovodstroy, Rostov-na-Donu.

PEREL'SHTEYN, I.Yu.

Industrial methods for assembling gas-field equipment. Stroi.
truboprov. 9 no.8:26-27 Ag '64. (MIRA 17:12)

1. Trest Yushgazprovodstroy, Rostov-na-Donu.

PEFEL'SHTEYN, M.Ye.

Frequency pickups of control systems. Izv.vys.ucheb.
zav.; neft i gaz 6 no. 9/9-100 '63. (MIRA 17:2)

1. Azerbaydzhanskiy institut nefti i khimii im. M.Azizbekova.

PEREL'SHTEYN, M.Ye.

Studying the possibilities of using the sounding of turbulent flow for calculating a flowmeter. Izv. vysh. ucheb. zav.;
neft' i gaz 6 no.3:97-102 '63. (MIRA 16:7)

1. Azerbayizhanskiy institut nefti i khimii imeni Azizbekova.
(Flowmeters)

PEREL'SHTEYN, N.I., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii;
MITGARTS, L.B., kandidat tekhnicheskikh nauk.

Sectional prestressed reinforced concrete girders. Sbor.mat. o nov.
tekh. v strci. 16 no.9:9-13 '54. (MLRA 7:12)
(Girders) (Concrete, Prestressed)

PEREL'SHTEYN, M.L.

PEREL'SHTEYN, M.L., laureat Stalinskoy premii.

Sectional reinforced concrete elements for industrial buildings.
Stroi.prom. 32 no.12:6-11 D'64. (MIRA 8:3)

1. Nauchno-issledovatel'skiy institut po stroitel'stvu Ministerstva stroitel'stva SSSR.
(Girders)(Reinforced concrete construction)

PEREL'SHTEYN, N.L., kandidat tekhnicheskikh nauk.

**Prestressed reinforced concrete in the construction of industrial
buildings abroad. Bet. i shel.-bet. no.9:332-340 D '55.(MLRA 9:3)
(Europe, Western--Prestressed concrete construction)**

MIKHAYLOV, V.V.; PEREL'SHTAYN, N.L.; PROSKURYAKOV, N.K.; UDOD, V.Ya.,
redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Prestressed reinforced concrete in foreign countries; based on the
Second International Congress in Amsterdam] Napriazhenno armirovan-
nyi zhelezobeton za rubezhom; po materialam vtorogo Mezhdunarodnogo
kongressa v Amsterdame. Moskva, Gos. izd-vo lit-ry po stroit. i
arkhitekture, 1956. 61 p. (MIRA 9:8)

1. Moscow. Tsentral'nyy institut informatsii po stroitel'stvu.
(Amsterdam--Prestressed concrete--Congresses)

PEREL'SHTEYN, M.L., kandidat tekhnicheskikh nauk.

Bundles of high-strength wires for prestressed reinforced concrete
construction elements. Nov.tekh.i porod.op.v strel. 18 no.4:3-5 Ap
'56. (Prestressed concrete) (MLRA 9:7)

~~PEREL'SHTEYN~~, N.L., kandidat tekhnicheskikh nauk; PITSKEL', L.N., kandidat tekhnicheskikh nauk; KARANFILOV, T.S., kandidat tekhnicheskikh nauk.

Prestressed reinforced concrete sectional girders. Nov.tekh.1
pered.op. v stroi. 19 no.2:1-5 P '57. (MLRA 10:4)
(Girders) (Prestressed concrete construction)

12.05.54
DYKHOVICHNYY, Abram Ionovich, prof.; DYKHOVICHNYY, Yuriy Abramovich, inzh.
PEREL'SHTEYN, M.I., otvetstvennyy red.; KRASOVSKIY, I.P., red.
izd-vn; KOROVIKHOVA, Z.A., tekhn.red.

[Reinforced concrete construction, with special applications to
the coal industry] Zhelezobetonnye konstruksii (s primerami ikh
primeneniia v ugol'noi promyshlennosti). Moskva, Ugletekhnizdat,
1957. 491 p. (MIRA 11:2)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR
(for Perel'shteyn)
(Reinforced concrete construction)
(Coal mines and mining)

PEREL'SHTEYN, N.I., kand.tekhn.nauk.

Trusses made of linear elements. Nov.tekh. i pered. op. v stroi.
19 no.12:1-5 D '57. (MIRA 11:1)
(Trusses)

GOTSIRIDZE, G.G.; VASIL'YEV, A.P.; MIKHAYLOV, V.V.; FEREL'SHTEN,
E.L. (deceased); D. ISHKIN, R.G.; Y. KUBOVSKIY, B.V.;
MITNIK, G.S., kand. tekhn. nauk, nauchn. red.; KUZNETSOVA,
I.N., red.

[Prestressed reinforced concrete; based on materials at the
Fourth International Congress on Prestressed Reinforced
Concrete Structures held at Rome and Naples in 1962] Pred-
varitel'no napriazhenniy zhelezobeton; po materialam IV
Mezhdunarodnogo kongressa po predvaritel'no napriazhennym
zhelezobetonnykh konstruktsiyam (FIP), Rim-Neapol', 1962 g.
Moskva, Stroizdat, 1964. 281 p. (MIRA 17:10)

PEREL'SHTEYN, N.L.

Problems of the realization of designs in prestressed concrete. Bet. i zhel.-bet. 8 no.12:534-539 D '62. (MIRA 16:2)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.

(Prestressed concrete construction)

PEREL'SHTEYN, N. I.

"The Economics of Prestressed Reinforced Concrete According to the Experience of the USSR."

report presented at the Intl. Congress on Prestressed Concrete, Rome/Naples, Italy,
27 May - 2 June 1962

PEREL'SHTEYN, N.L.; MITGARTS, L.V., kand. tekhn. nauk; MAKAROVA,
R.P., red.; SVETOZARSKIY, K.V., red.

[Manual on the manufacture of prestressed reinforced-concrete
segmented girders from linear elements] Rukovodstvo po izgotov-
leniu sbornyykh zhelezobetonnykh predvaritel'no napriazhen-
nykh segmentnykh ferm iz lineinykh elementov. Moskva, TSentr.
biuro tekhn. informatsii, 1961. 67 p. (MIRA 15:3)

1. Russia (1917- R.S.F.S.R.) Ministerstvo stroitel'stva.
Tekhnicheskoye upravleniye.
(Girders) (Prestressed concrete construction)

DYKHOVICHNYY, Abram Ionovich, prof.; DYKHOVICHNYY, Yuriy Abramovich, inzh.; PEREL'SHTEYN, N.L., retsenzent; LEV, M.A., inzh., retsenzent; CHECHKOV, L.V., red. izd-va; SABITOV, A., tekhn. red.; PROZOROVSKAYA, V.L., tekhn. red.

[Reinforced-concrete structures and their use in mine construction] Zhelezobetonnye konstruktsii i ikh primeneniye v shakhtnom stroitel'stve. ¹zd.2. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu, 1962. 791 p. (MIRA 15:3)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR (for Perel'shteyn).
(Reinforced concrete construction) (Mining engineering)

PEREL'SHTEYN, N.I.

Precast reinforced-concrete members made of linear elements for industrial and public buildings. Bet. i zhel.-bet. no. 5:196-202
My '60. (MIRA 14:5)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(Precast concrete)

PEREL'SHTAYN, N.L.
PEREL'SHTAYN, N.L.; KALATUROV, B.A., kand. tekhn. nauk.

Precast reinforced concrete used in the Polish People's Republic.
Bet. i zhel.-bet. 10:406-409 0 '57. (MIRA 10:12)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR
(for Perelshtayn)
(Poland—Precast concrete construction)

PEREL'SHEYN, Nsum L'vovich; KOBLIKOV, M.P., red.; ZERNOV, P.M., otv.
za vypusk; SUKHAREVA, R.A., tekhn.red.

[Using prestressed reinforced concrete in construction] Pred-
varitel'no napriazhennyi zhelezobeton v stroitel'stve. Moskva,
Ob-vo po rasprostraneniю polit. i nauchn.znaniy RSFSR, 1959.
41 p. (Moskovskii dom nauchno-tekhnicheskoi propagandy. Peredo-
voi opyt proizvodstva. Seriya: Stroitel'stvo, no.4).

(MIRA 13:6)

(Prestressed concrete)

PEREL'SHTEYN, N.L.

Prestressed wire-reinforced concrete girders for roofs of industrial buildings. Bat. i shel.-bat. no.4:148-153 Ap '59.

(MIRA 12:6)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(Girders) (Roofing, Concrete)

PIRELSHTEYN, N.L.

Precast prestressed reinforced concrete trusses made of linear
members. Nov. tekhn. i pered. op. v stroi. 20 no.9:1-6 S '58.
(MIRA 11:10)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury SSSR.
(Trusses) (Precast concrete construction)

~~PEREL'SHTEYN~~, N.L., obshchiy red.; DRUZHININ, B.N., inzhener; nauchnyy red.;
CHERNASHKIN, V.G., kand. tekhn. nauk, nauchnyy red.; GRABINSKIY,
Ye.K., [deceased], inzhener, red.; IMMERMAN, A.G., kand. tekhn. nauk,
red.; RAFAILOVICH, L.A., inzh., red.; GORCHAKOV, A.V., otvetstvennyy
red.; ZLATOTSVETOVA, I.I., red.; VASILEVSKIY, B.A., tekhn. red.

[Using prestressed reinforced concrete; based on data from the Second
International Congress, Amsterdam, September 1955] Primenenie
napravlenno armirovannogo zhelezobetona; po materialam Vtorogo
mezhdunarodnogo kongressa (g. Amsterdam, sentyabr' 1955 g.). Moskva,
1957. 322 p. (MIRA 10:12)

1. Russia (1923- U.S.S.R.) Ministerstvo stroitel'stva. Tekhnicheskoye
upravleniye. 2. Tsentral'noye byuro tekhnicheskoy informatsii (for
Zlatotsvetova). 3. Glav-korrespondent Akademii stroitel'stva i
arkhitektury (for Perel'shteyn).
(Amsterdam--Prestressed concrete--Congresses)

PERIODIC
KURUK, N.M., red.; SHISHAKOV, S.N., red.; ARSEN'YEV, L.B., red.;
BOBORYKIN, Ye.P., red.; VISHNEVSKIY, A.V., red.; GORCHAKOV, A.V.,
red. GUSHCEIN, V.M., red.; DRUZHININ, B.N., red.; LEPILIN, G.M.,
red.; JEREM'YEV, E.L., red.; TESLYA-TESLENKO, V.P., red.;
AGRANATOV, Yu.O., tekhn.red.

[Precast reinforced concrete members; planning and using] Sbornye
zhelezobetonnye konstruktsii; opyt proektirovaniya i primeneniya.
Moskva, TSentr. biuro tekhn.inform., 1958. 422 p. (MORA 11:5)

1. Russia (1917- R.S.F.S.R.) Ministerstvo stroitel'stva.
Tekhnicheskoye upravleniye.
(Precast concrete construction)

/Corresponding 07-10-7/14

AUTHORS: Perel'shteyn, N.L., Member of the Academy for Building and
Architecture of the USSR. and Kalaturov, B.A., Candi-
date of Mechanical Sciences.

TITLE: **Precast Reinforced Concrete in the Polish People's Republic**
(obornyy zhelezobeton v Pol'skoy narodnoy respublike).

PERIODICAL: Beton i Zhelezobeton, 1987, Nr.10. pp.406 - 409.(USSR).

ABSTRACT: The construction of the 11-storey university library
building in Lodz is described in this article. It is
based on a system of skeleton and panel. The pre-cast
skeleton forms a three-bay frame connected by 10 cm
thick floor slabs. The frame consists of three elements,
two 'H' shaped units with columns and one middle beam,
the 'H' shaped unit weighing 3.2 tons (Fig.1). The
panels are faced and have window perforations. The
jointing of units is carried out by welding the main
steel reinforcement together. The building is assembled
by the use of two tower cranes of 45-ton capacity
(lifting moment). Each storey took five days to assemble.
Fig.2 shows other constructions used for multi-storey
buildings. In this instance, no beams, but only columns
and slabs were used. The building was designed for
1,500 kg/m² of superimposed load. The columns terminate

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Precast Reinforced Concrete in the Polish People's Republic 97-10-7/14

with capitals in the shape of diagonal cantilevers which support diamond shaped ribbed slabs which, in turn, support central rectangular slabs. When the columns are based on a 5m x 5m grid the consumption of steel per m² of this floor construction is 20.9/kg, and that of concrete 0.145 m³. The engineering workshop of TETs in Lodz is mentioned as a further example of a large construction. It is assembled from pre-cast units with a total volume of 350,000 m³ and designed as a four-bay system. The boiler house columns are 31 m high "box-section", weighing 96 tons (Fig.5). Double columns weighing 17 tons were used for the workshop (Fig.3). These columns support pre-stressed beams carrying bridge cranes of 75-ton capacity. Concrete Mark 200 was used for these constructions. The assembly was carried out by the Gantry crane (Fig.6) mounted on rails. The frame of the boiler house, as well as the workshop, has a span of 24 m and 27 m weighing respectively 3.93 tons and 13.9 tons. In this case the concrete used was Mark 500. Also illustrated is a silo in Jaroshev (Fig. 7), being 105 m x 12.8 m in plan, 19.2 m high, and consisting of two rows of eighteen silos, each of 153 ton

Gari 2/3

97-10-7/14

• Precast Reinforced Concrete in the Polish People's Republic

capacity. The sports arena "Staleva Volya" is an example of a corrugated vault of assembled reinforced concrete type spanning 46 m, height 13 m. The sections are joined together by grouting in the projecting reinforcement. A segmentary truss, used when it is necessary to span more than 30 m, is illustrated. It was used in the exhibition hall in Poznan. At a scientific conference organized by a committee of engineers of the Polish Academy of Science in 1956 on the subject of sectional constructions, the following points were discussed. Economy of materials, steel corrosion and economical calculations and planning of pre-stressed concrete constructions. There are 11 Figures.

AVAILABLE: Library of Congress.

Card 3/3 1. Reinforced concrete-Applications 2. Concrete-Poland

FEREL'SHTEYN, S.B.

Chronic nonspecific ulcerative pancolitis complicated by
polyposis. Kaz.med.zhur. no.3:79-80 My-Je '63. (MIRA 16:9)

1. Vtoraya infektsionnaya bol'nitsa (glavnyy vrach - M.I.
Kovalarchik) goroda Kazani.
(COLITIS) (COLON--TUMORS)

ZOBNINA, K.S.; PEREL'SHTEYN, S.B.; RAPPE, F.I. (Kazan')

Production of an adaptive dysenteric bacteriophage and its
effectiveness in treating acute dysentery. Kaz. med. zhur.
no.5:76-77 S-0 '61. (MIRA 15:3)

(DYSENTERY)
(BACTERIOPHAGE)

RADBIL', O.S., prof.; VALIULLINA, R.K.; KOVALERCHIK, E.I.;
FEREL'SHTEYN, S.P.

Clinical aspects and treatment of chronic nonspecific ulcerative
colitis. Terap.arkh. no.8:11-16 '62. (MIRA 15:12)

1. Iz 2-y kafedry terapii (zav. - prof. O.S. Radbil') Kazanskogo
gosudarstvennogo instituta dlya usovershenstvovaniya vrachey i
2-y infektsionnoy bol'nitsy (glavnyy vrach E.I. Kovalerchik).
(COLITIS)

PEREL'SHTEYN, S.B.

Use of the adapted dysentery bacteriophage in the over-all treatment of adults with chronic dysentery. Kaz. med. zhur. 41 no.3:59-62
My-Je '60. (MIRA 13:9)

1. Iz kafedry infektsionnykh bolezney (zav. - dotsent A.Ye. Resnik)
Kazanskogo meditsinskogo instituta i 2-y infektsionnoy bol'nitsy
(glavvrach - M.I. Kovalerchik).
(DYSENTERY) (BACTERIOPHAGE)

TRYAPITSYN, A.V., inzh.; PEREL'SHTEYN, S.L., inzh.

Insuring the rigidity of one-story industrial buildings. Bet. 1
zhel.bet. 8 no.3:134-136 Mr '62. (MIRA 15:3)
(Industrial buildings)

PEREL'SHTEYN, S. L.

POTYATO, V.T., inzhener.; RAYEV, V.N., inzhener; PEREL'SHTEYN, S.L.

Standard plan refrigerating plant built of precast reinforced concrete.
Nov.tekh. i pered.op. v stroi. 18 no. 11:5-8 M '56. (MIRA 10:1)
(Refrigeration and refrigerating machinery) (Precast concrete
construction)

PEREL'SHTEYN, Ya.I., doklady, khand. tekhn. nauk

9.
Evaluating adjusted results of measurements. Sbor. nauch. trud.
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1. Vsesoyuznyy teplotekhnicheskiy institut imeni Dzerzhinskogo.
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MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALKKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', E.Z., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, B.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; POKIN, K.P., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G., prof., doktor tekhn.nauk; DERESHKOVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk; SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY, M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A., inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn.nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERILOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

MURASHEV, V.A.--(continued) Card 2.

MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk;
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nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev,
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1. Of the Otolaryngological Division of the Republic Hospital, Nal'chik.

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1. Nauchno-issledovatel'skiy institut pchelovodstva, pos.Rybnoye
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1. Institut khimii prirodnykh soedineniy AN SSSR i Vsesoyuznyy
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